

Serial No.: 09/690,566  
Atty. Docket No.: 119645.00102  
Reply to Office Action of May 19, 2005

### **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims**

1. (Currently Amended) A computer-implemented method for determining customer service impact, comprising:

receiving item orders having a requested completion date;

scheduling a scheduled completion date for each item order;

selecting at least one item order, each item order having a scheduled completion date;

comparing the scheduled completion date with the requested completion date for each selected item order, wherein said comparing comprises:

generating a demand array of item orders;

generating a supply array of manufacturing inventory;

selecting an item order in the demand array;

matching manufacturing inventory in the supply array with the selected item order; and,

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comparing the scheduled completion date of an item in the supply array with the requested completion date for the matched item in the demand array; and  
deriving a customer service measurement for each selected item order based on said comparing, the customer service measurement comprising a measurement of at least one of time and money.

2. (Previously Presented) The method of claim 1 wherein said deriving comprises:  
deriving a customer service measurement for each item order based on said comparing, the customer service measurement comprising the time difference between the requested completion date and a scheduled completion date.
3. (Original) The method of claim 2 wherein the time difference is measured in one or more of years, weeks, days, hours, minutes, and seconds.
4. (Previously Presented) The method of claim 1 wherein said deriving comprises:  
deriving a customer service measurement for each item order based on said comparing, the customer service measurement comprising the value of the item order.
5. (Previously Presented) The method of claim 1 wherein said deriving comprises:  
deriving a customer service measurement for each item order based on said comparing, the customer service measurement comprising the amount of time difference between the

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requested completion date and a scheduled completion date multiplied by the value of the item order.

6. (Previously Presented) The method of claim 1 wherein said deriving comprises:  
deriving a customer service measurement for each item order based on said comparing,  
the customer service measurement comprising the amount of time difference between the  
requested completion date and a scheduled completion date multiplied by the value of the item  
order and multiplied by a predetermined interest rate.

7. (Previously Presented) The method of claim 1, further comprising:  
determining an overall customer service measurement based on the customer service  
measurement for each item order.

8. (Previously Presented) The method of claim 7 further comprising:  
reporting the overall customer service measurement as the overall customer service  
measurement for that scheduling operation.

9. (Previously Presented) The method of claim 7 further comprising:  
displaying the customer service measurement on a calendar showing the total customer  
service measurement for a predetermined time period.

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10. (Previously Presented) The method of claim 7, further comprising repeating said receiving, scheduling, selecting, comparing, deriving, and determining for different schedules to determine the customer service impact of schedule changes.
11. (Previously Presented) The method of claim 1, further comprising:  
determining an customer service measurement for a first customer based on the customer service measurement for each item order from the first customer.
12. (Previously Presented) The method of claim 11 further comprising:  
displaying the customer service measurement on a calendar showing the total customer service measurement for a predetermined time period.
13. (Previously Presented) The method of claim 11, further comprising repeating said receiving, scheduling, selecting, comparing and determining for different schedules to determine the customer service impact of schedule changes.
14. (Canceled)
15. (Currently Amended) The method of claim 14-1, wherein said generating a demand array comprises generating a demand array of unshipped customer line items.
16. (Currently Amended) The method of claim 14-1, wherein said generating a supply array comprises generating a supply array of at least one of inventory work orders and manufactured inventory.

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17. (Previously Presented) The method of claim 1, further comprising:
  - identifying a subset of work orders having a customer service measurement greater than a predetermined threshold;
  - performing at least one of a utilization, contention, and material constraint inquiry on the subset of work orders.
18. (Previously Presented) The method of claim 17, further comprising:
  - identifying as a potential bottleneck a material or resource having the greatest result in the at least one of a utilization, contention, and material constraint inquiry.
19. (Currently Amended) A system for determining customer service impact, comprising:
  - a receiver for receiving item orders having a requested completion date;
  - a scheduler for scheduling a scheduled completion date for each item order;
  - a selector for selecting at least one item order, each item order having a scheduled completion date;
  - a comparator for comparing the scheduled completion date with the requested completion date for the selected item orders, wherein the comparator further comprises:
    - a first generator for generating a demand array of item orders;
    - a second generator generating a supply array of manufacturing inventory;

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- a selector for selecting an item order in the demand array;
- a matching subsystem for matching manufacturing inventory in the supply array
- with the selected item order;
- a comparator for comparing the scheduled completion date of an item in the
- supply array with the requested completion date for the matched item in the demand
- array; and
- a measurement subsystem for deriving a customer service measurement, the customer service measurement comprising at least one of time and money, for each selected item order based on the comparison.
20. (Original) The system of claim 19 wherein the customer service measurement comprises the time difference between the requested completion date and a scheduled completion date.
21. (Original) The system of claim 20 wherein the time difference is measured in one or more of years, weeks, days, hours, minutes, and seconds.
22. (Original) The system of claim 19 wherein the customer service measurement comprises the value of the item order.
23. (Original) The system of claim 19 wherein the customer service measurement comprises the amount of time difference between the requested completion date and a scheduled completion date multiplied by the value of the item order.

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24. (Original) The system of claim 19 wherein the customer service measurement comprises the amount of time difference between the requested completion date and a scheduled completion date, multiplied by the value of the item order and multiplied by a predetermined interest rate.
25. (Original) The system of claim 19, further comprising a summer for determining an overall customer service measurement based on the customer service measurement for each item order.
26. (Original) The system of claim 19 further comprising a display for reporting the overall customer service measurement as the overall customer service measurement for that scheduling operation.
27. (Original) The system of claim 19 further comprising a display for displaying the customer service measurement on a calendar showing the total customer service measurement for a predetermined time period.
28. (Original) The system of claim 19 further comprising a display for displaying the customer service measurement of different schedules to determine the customer service impact of schedule changes.
29. (Original) The system of claim 19, further comprising a display for displaying a customer service measurement for a first customer based on the customer service measurement for each item order from the first customer.

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30. (Original) The system of claim 19 further comprising a display for displaying the customer service measurement on a calendar showing the total customer service measurement for a predetermined time period.

31. (Canceled)

32. (Currently Amended) The system of claim 3419, wherein the first generator generates a demand array of unshipped customer line items.

33. (Currently Amended) The system of claim 3419, wherein the second generator generates a supply array of at least one of inventory work orders and manufactured inventory.